

## SUMMARY OF INVENTION V.S. CITED PRIOR ART PATENTS

### I. Gist of Cao Invention

Current invention (hereinafter, "Cao Invention") concerns the improved design and configuration of grinding tooth and holding bracket, by having notch on the shank portion of a tooth, and having corresponding rib on the receiving channel portion of the bracket, thus solving TWO important industry problems:

(1) Installation of new teeth is done instantly, relying on the rib/notch structure implementation to align the teeth in position quickly and properly, without the need to gauge the length of the protruding portion of the teeth; and

(2) Rib/notch structure increases the clamping power of the bracket.

Moreover, Cao Invention is NOT about having tooth and holding bracket, because this is the universal structure of cutting tool.

Cao Invention disclosed and claimed the structural implementation of notch(es) on the shank portion of a cutting tooth, and the corresponding rib on the holding bracket for receivably and easily aligning cutting tooth into proper position.

None of the cited prior disclosed Cao Invention's structural implementation, or attempted to solve the industry problems Cao Invention tried to solve.

Examiner's rejections under 35 U.S.C. 102 and 35 U.S.C. 103, therefore, are not properly based on Cao Invention's notch/rib structure.

### II. Relevant Points and Authorities

Applicant respectfully traverse Examiner's rejection under 35 U.S.C. 102 (Anticipation) and 35 U.S.C. 103 (Obviousness) as contrary to the prevailing authorities as stated below:

1                   **35 U.S.C. §102 - ANTICIPATION**

2                   (a) For prior art to anticipate under 35 U.S.C. 102, every element of the claimed  
3 invention must be identically disclosed, either expressly or under principles of inherency, in a  
4 single reference. *Corning Glass Works v. Sumitomo Electric*, 9 U.S.P.Q.2d 1962, 1965  
5 (CAFC, 1989).

6                   (b) Anticipation requires the presence in a single prior art disclosure of all elements  
7 of a claimed invention arranged as in the claim. A prior art disclosure that ‘almost’ meets that  
8 standard may render the claim invalid under 35 U.S.C. 103; it does not ‘anticipate’. *Connell*  
9 *v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (CAFC 1983).

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11                   **35 U.S.C. §103 - OBVIOUSNESS**

12                   (c) The test under 35 U.S.C. 103 (Obvious) is not whether an improvement or a use  
13 set for the in a patent would have been obvious or non-obvious; rather the test is whether the  
14 claimed invention, considered as a whole, would have been obvious. *Jones v. Hardy*, 220  
15 U.S.P.Q. 1021, 1024 (CAFC 1984). It is impermissible to focus either on the “gist” or “core”  
16 of the invention, or on specific differences between the claimed invention and the prior art.  
17 *Jones*, at 1024.

18                   (d) Combination of prior arts by Examiner to make obviousness rejection is only  
19 proper, only if there is some objective teaching in the prior art that would lead one of  
20 ordinary skill in the art to combine the relevant teachings of the references. In *Re Fine*, 5  
21 U.S.P.Q.2d 1596, 1598 (CAFC 1988).

22                   (e) In case where the prior art does not appreciate the existence of the problem  
23 solved by the invention, the applicant’s recognition of the problem is, in itself, strong  
24 evidence of the non-obviousness. In *Re Nomiya*, 184 U.S.P.Q. 607, 612-613 (CCPA 1975).

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1 **III. All cited prior arts do not teach Cao Invention**

2 1. Duwe 6,261,032 patent ("Duwe 032 Patent")

3 Contrary to Examiner's contention, Duwe 032 Patent disclosed **nothing** regarding  
4 Cao Invention's structure or the problems solved by Cao Invention.

5 For example, Cao Invention teaches the proper alignment of tooth when installed  
6 onto the bracket by "clicking" the rib/notch together.

7 Duwe 032, however, teaches that "In order to clamp the cutting insert 2 in the  
8 toolholder 1, the cutting insert 2 is inserted within the recess *until it abuts the stop (emphasis*  
9 *added).*" See Column 3, lines 55 - 57.

10 It's evidently clear that Duwe did not employ the rib/notch structure to line up or  
11 set the position of the cutting insert, but simply allows the insert to *stop until it abuts the stop.*

12 There is no disclosed or claimed invention by Duwe to increase the clamping  
13 power; another problem solved by Cao Invention.

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15 2. Friedmann 5,150,992 Patent ("Friedmann 992 Patent")

16 Friedmann 992 Patent disclosed and claimed a cutting tool assembly having some  
17 kind of groove/rib structure. However, 992's groove/rib structure is completely different and  
18 thus irrelevant from Cao's Invention.

19 Attached in Exhibit A shows columns 3 and 4 of Friedmann 992 Patent's  
20 disclosure, as well as its Figures 1 and 2. (It is not disputed that a patent can NOT claim what  
21 is NOT disclosed.)

22 In lines 5 - 8, column 4, Friedmann 992 disclosed the V-shaped keying ribs 17 and  
23 18, which are designed to mate within the V-shaped grooves on the insert 2 (grooves 26 and  
24 28 respectively).

25 Fig. 2 shows the keying ribs 17 and 18.

26 Fig. 1 shows the mating grooves of 26 and 28.  
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1 From the examination of the disclosed and claimed structure of Friedmann 992  
2 Patent, it's abundantly clear that:

3 a. Friedmann 992 Patent does NOT provide the instant protruding length alignment  
4 achieved by Cao Invention.

5 b. Friedmann 992 Patent provides the V-shaped rib/groove structure for guiding  
6 insert (containing the cutting tooth into the holder) that is irrelevant to Cao Invention.  
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8 3. Lindholm 6,260,592 Patent ("Lindholm 592 Patent")

9 Lindholm 592 Patent, similar to Friedmann 992 Patent, failed to anticipate or render Cao  
10 Invention obvious, because its structural implementation is completely different, and thus  
11 irrelevant to Cao Invention. Lindhold 592, consequently, failed to achieve Cao Invention's  
12 claimed industrial benefits.

13 In Lindholm 592 Patent, there is NO corresponding rib/notch structure on the shank  
14 portion of the cutting tooth and on the holding brackets.

15 Lindholm 592, however, disclosed and claimed a "notch" 15 (on the holder unit) to  
16 receive the cutter 6.

17 Each inventor can be his own lexicographer.

18 The "notch" 15 in Lindolm 592 Patent corresponds to the opening in the bracket to  
19 receive the shank portion of the cutting tooth. Lindholm fig. 5 shows that clearly.

20 Lindholm 592 disclosed and claimed nothing of Cao Invention.  
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22 4. Aebi 4,733,995 Patent ("Aebi 995 Patent")

23 Aebi 995 Patent, similar to Friedmann 992 Patent and Lindholm 592 Patent, failed to  
24 anticipate or render Cao Invention obvious, because its structural implementation is completely  
25 different, and thus irrelevant to Cao Invention. Aebi 995 Patent, consequently, failed to achieve  
26 Cao Invention's claimed industrial benefits.

27 Aebi 995 does NOT disclose any cutting tooth and holding bracket having rib/notch or  
28 some kind of groove structure.

1 Aebi 995 Patent did mention something about “groove”, which is about Aebi 995  
2 Patent’s function to produce T-shaped groove.

3 Cao Invention is NOT about producing any kind of “grooves” on work pieces, whether  
4 it’s T-shaped or not.

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6 5. Hecht 6,565,292 Patent (“Hecht 292 Patent”)

7 Hecht 292 Patent, similar to Aebi 995 Patent, Friedmann 992 Patent and Lindholm 592  
8 Patent, failed to anticipate or render Cao Invention obvious, because its structural  
9 implementation is completely different, and thus irrelevant to Cao Invention. Hecht 292 Patent,  
10 consequently, failed to achieve Cao Invention’s claimed industrial benefits.

11 There is no rib/notch/groove, or any similar structure disclosed or claimed in Hecht 292.

12 Hecht 292 Patent, as a result, does not provide the instant proper length alignment when  
13 replacing new cutting tooth. Hecht 292, further, does NOT result in any increased claiming  
14 power, which is a benefit achieved by Cao Invention.

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16 **IV. Rejections under 35 U.S.C. §112, second paragraph**

17 Responding to Examiner’s Detailed Office Action of 8/22/2005 on page 2, applicant  
18 amended Specification to give additional descriptive text, without adding any new matter, as  
19 well as the claims, to provide proper antecedent basis for the amended claims.

20 Claim amendments start on page 8.

21 Specification amendments start on page 12.

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1 **V. Conclusion**

2 As a conclusion, it can be seen that all the cited prior arts are either:

- 3 1. Not relevant, or,  
4 2. Teaches away from Cao Invention; furthermore,  
5 3. There is no suggestion to combine any patent to render Cao Invention obvious (in fact,  
6 even if all four cited prior arts are combined, they still would not teach Cao Invention.)  
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8 For the foregoing reasons, it is submitted that the present application, along with the  
9 proposed amendments to Claims and Specification, is in condition for allowance, and such  
10 action is requested.  
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12 Dated: November 21, 2005

Respectfully,

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